

# South Florida's People-made Water System

You could say SF stands for South Florida—or Soggy and Flat!



I wouldn't be surprised if the first people to set foot here turned around and went back where they came from—South Florida in its natural state was great for us animals, but not so hot for people.

Because of the rain and flat terrain, many of the places in South Florida where people live today were under water for at least part of year.

Shortly after Florida became a state in 1845, Congress passed the Swamp Lands Act of 1850. This law made all swamp lands the property of the state, and was the first move in getting the land dried out so people could use it.

In 1881, a Philadelphian named Hamilton Disston saw a chance to make some money on bargain-priced Florida land. For 25 cents an acre, he bought four million acres of land from the state and began large-scale drainage by building an outlet from Lake Okeechobee to the Gulf Coast via the Caloosahatchee River. He also built canals connecting some of the lakes in the Upper Kissimmee area, providing additional drainage and allowing boats to navigate between lakes.

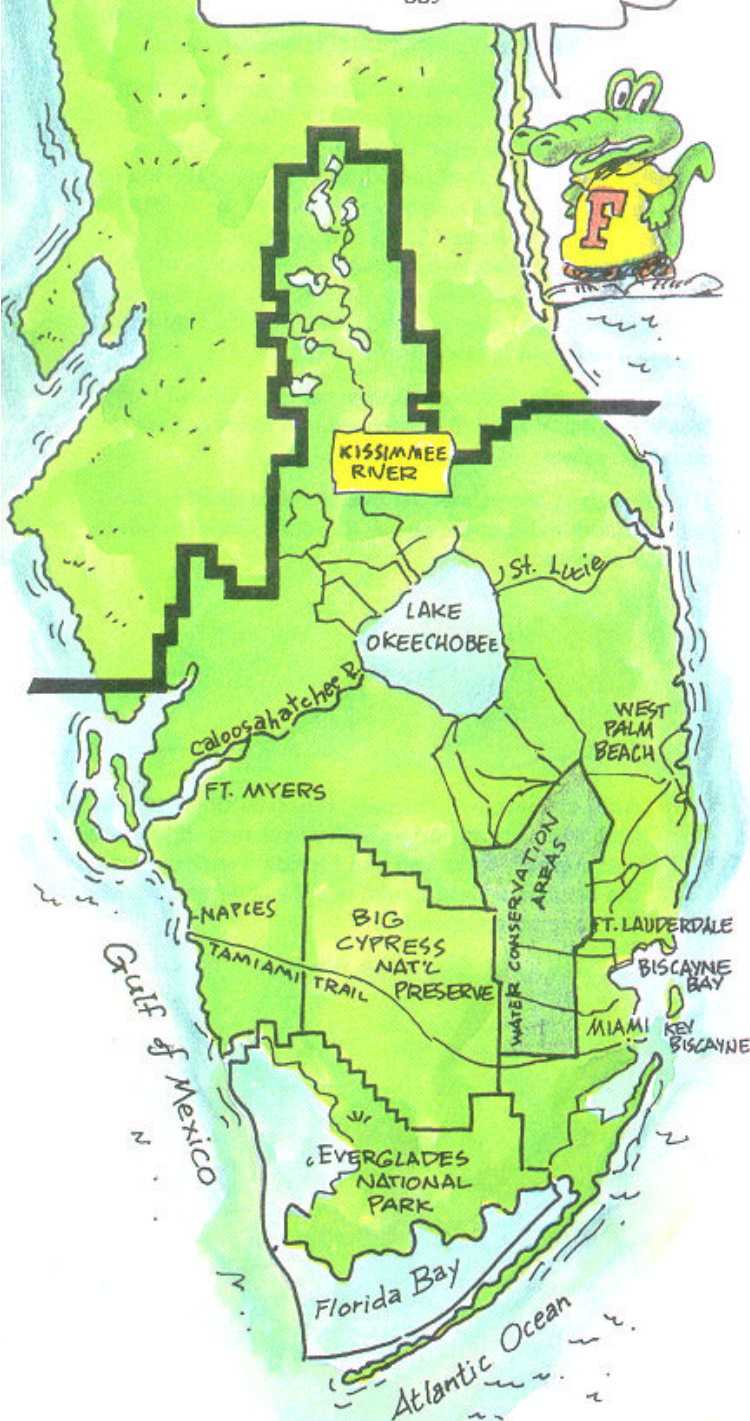
Disston's was the first large-scale, regional drainage project; he proved that while such undertakings were both complicated and expensive, they were possible. His success attracted world attention to Florida.

In 1907, the Everglades Drainage District was created to drain the area south of Lake Okeechobee by drawing off excess water via canals to the Atlantic Ocean. Six major canals, 440 miles of levees and 16 locks eventually were built between Lake Okeechobee and the Atlantic. They lowered water in the Everglades and created habitable land from Palm Beach to Miami.

Another major development was completion of a railroad in 1912 from Jacksonville to Key West, further opening up the area. As new population moved in, local water systems were developed, relying mainly on wells and underground water supplies. This set the stage for a problem in future years. Fresh water taken from the ground was starting to be replaced by salt water moving inland from the ocean.

Nature persisted in playing fickle drought-and-flood tricks on South Florida. Severe flooding from hurricanes in 1926 and 1928 was followed by one of the driest periods in Florida history, which began in 1931 and lasted 14 years.

Following another devastating storm in 1947, Congress approved plans for a regional water management system. In 1949, the Florida Legislature created the Central and Southern Florida Flood Control District (FCD), to oversee the federal project.



The major components of the flood control project included:

- construction of a levee around Lake Okeechobee to prevent a recurrence of disastrous hurricane-driven wind tides and to increase the lake's storage capacity.
- a network of 1400 miles of canals and levees. Flow of water in the canals is regulated by more than 125 water control structures and 18 pumping stations which have a combined capacity of more than 20 billion gallons per day (20,704,005,900).
- saltwater intrusion barriers at the seaward edge of each canal.
- creation of three water conservation areas to store water for both flood control and water supply purposes, and to recharge the underground aquifer system. The conservation areas preserve almost 50 percent of the original Everglades in a wilderness state.

—channelizing the natural curves of the Kissimmee River to provide flood protection in the Kissimmee River Basin.

But all these projects proved to be mixed blessings. In addition to providing flood control, water supplies and land, people-made projects had produced some significant impacts on the environment.

In 1972, Florida passed the Water Resources Act which broadened the authority and responsibilities of the existing FCD, and created four other regional water control agencies in the state. The FCD was renamed the South Florida Water Management District in 1976, to more accurately reflect its new functions.

Today, strong efforts are being made to balance programs and, where possible, return the environment more nearly to the condition it was in before the arrival of people.

## Growing Water Needs

Place the following events on the timeline below and label them. Note the example of Florida statehood.

- Central and Southern Florida Flood Control District established.
- Everglades Drainage District created.
- Flagler railroad completed to Key West.
- Flood Control District renamed South Florida Water Management District.
- Lake Okeechobee outlet construction began.
- Beginning of 14 years of drought.
- Swamp Lands Act passed.
- Water Resources Act passed.

Study the South Florida population chart and answer the following questions:

In which year did the population reach 500,000? \_\_\_\_\_

What was the population in 1955? \_\_\_\_\_

In which year did the population reach 3.5 million? \_\_\_\_\_

What was the population in 1985? \_\_\_\_\_

Draw a vertical line on the population bar

below for every one-half million people and label the population at that point below the bar. Note the example of .5 million.

On a separate sheet of paper, write three conclusions that can be drawn from the information presented in the reading and the population chart. Explain how you arrived at your conclusions by citing the appropriate data.

